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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/725,786	11/29/2000	Eric R. Uner	00193	8687
30114	7590	04/14/2004	EXAMINER	
MERONI + MERONI P.O. BOX 309 BARRINGTON, IL 60011			SONG, HOSUK	
			ART UNIT	PAPER NUMBER
			2135	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PRG

Office Action Summary	Application No. 09/725,786	Applicant(s) UNER, ERIC R.	
	Examiner Hosuk Song	Art Unit 2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-210 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1-37, 53-89, 104-143, 157-196 is/are allowed.
- 6) ☒ Claim(s) 38-44, 46-52, 90-96, 98-103, 144-148, 150-156, 197-201 and 203-210 is/are rejected.
- 7) ☒ Claim(s) 45, 97, 149 and 202 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Abstract

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "**means**" and "**said,**" **should be avoided.** The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title.

It should avoid using phrases which can be implied, such as, "The disclosure concerns,"

"The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 38-44, 46-52, 90-96, 98-103, 144-148, 150-156, 197-201, 203-210 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ng(US 6,640,301) in view of Wrzesinski(US 5,383,134).

Claim 38: Ng's patent discloses a character generating server comprising a random generator connecting to character generator in (fig.6,#50). A temporal reference storage connecting to character generator in (fig.6 and col.8,lines 54-57). Ng discloses a key pool group having a key and pool in (fig.6,#30), connected to character generator in (fig.6). Ng discloses

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character generating server being capable of generating a character set having a pre-set number of different characters in (col.8,lines 2-11;col.10,lines 8-12). Ng discloses network interface connecting to character generator in (fig.1,6). Ng does not specifically discloses an external timer device connecting to character generating server. Wrzesinski's patent discloses external timer device connecting to random number generator in (col.8,lines 1-20 and fig.6,#160). It would have been obvious to person of ordinary skill in the art at the time invention was made to employ an external timer to random generator as taught in Wrzesinski with random character genertor disclosed in Ng in order to control output of the character. Using an external timer allows user to dictate and manage how frequent characters should be outputted thus maintaining data efficiency.

Claim 39: Ng discloses character generating server capable of generating several different kinds of character sets in (fig.6).

Claims 40-41: Ng discloses character generating server has a plurality of key pool groups in (col.6,lines 63-66).

Claim 42: Ng does not specifically discloses an external timer device connecting to character generating server. Wrzesinski's patent discloses external timer device connecting to random number generator in (col.8,lines 1-20 and fig.6,#160). It would have been obvious to person of ordinary skill in the art at the time invention was made to employ an external timer to random generator as taught in Wrzesinski with random character generator disclosed in Ng in order to control output of the character. Using an external timer allows user to dictate and manage how frequent characters should be outputted thus maintaining data efficiency.

Claim 43: Ng discloses character generating server access to function to encode and and send out information and to receive and decode information in (col.15,lines 9-17).

Claim 44: Ng discloses temporal reference storage stores the most current time information in (fig.14,#74).

Claims 47-48: see claims 40-41 above.

Claims 46, 49: Neither Ng nor Wrzesinski specifically discloses list of mapping position. Official notice is taken that mapping position is well known in the art. One of ordinary skill in the art would have been motivated to use mapping position in order to mark the key thus preventing user from using used key which can be vulnerable for key attacks by the intruders.

Claim 50: Neither Ng nor Wrzesinski specifically discloses character generating server clears pool each time pool is full. Official notice is taken that pool clearing when full is well known in the art. One of ordinary skill in the art would have been motivated to clear pool when full in order to enhance data efficiency and prevent bottleneck.

Claim 51: see claim 38 above.

Claim 52: Neither Ng nor Wrzesinski specifically discloses character generating server listens on a fixed port for requests from a client. Official notice is taken that port listening is well known in the art. One of ordinary skill in the art would have been motivated to listen on fixed port in order to determine or deter any security threat against hackers.

Claim 90: Ng's patent discloses a character generating server comprising a random generator connecting to character generator in (fig.6,#50). A temporal reference storage connecting to character generator in (fig.6 and col.8,lines 54-57). Ng discloses a key pool group having a key and pool in (fig.6,#30), connected to character generator in (fig.6). Ng discloses character generating server being capable of generating a character set having a pre-set number of different characters in (col.8,lines 2-11;col.10,lines 8-12). Ng discloses network interface connecting to character generator in (fig.1,6). Ng does not specifically discloses an external timer device connecting to character generating server. Wrzesinski's patent discloses

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external timer device connecting to random number generator in (col.8,lines 1-20 and fig.6,#160). It would have been obvious to person of ordinary skill in the art at the time invention was made to employ an external timer to random generator as taught in Wrzesinski with random character generator disclosed in Ng in order to control output of the character. Using an external timer allows user to dictate and manage how frequent characters should be outputted thus maintaining data efficiency.

Claims 91-92: Ng discloses character generating server has a plurality of key pool groups in (col.6,lines 63-66).

Claims 93: Ng discloses recreating a character set from a key in (col.11,lines 37-42).

Claim 94: see claim 42 above.

Claim 95: Ng discloses character generating server access to function to encode and and send out information and to receive and decode information in (col.15,lines 9-17).

Claim 96: Ng discloses temporal reference storage stores the most current time information in (fig.14,#74).

Claims 98,99: Neither Ng nor Wrzesinski specifically discloses list of mapping position. Official notice is taken that mapping position is well known in the art. One of ordinary skill in the art would have been motivated to use mapping position in order to mark the key thus preventing user from using used key which can be vulnerable for key attacks by the intruders.

Claim 100: Neither Ng nor Wrzesinski specifically discloses character generating server clears pool each time pool is full. Official notice is taken that pool clearing when full is well known in the art. One of ordinary skill in the art would have been motivated to clear pool when full in order to enhance data efficiency and prevent bottleneck.

Claim 101: see claim 90 above.

Claim 102: Neither Ng nor Wrzesinski specifically discloses character generating server listens on a fixed port for requests from a client. Official notice is taken that port listening is well known in the art. One of ordinary skill in the art would have been motivated to listen on fixed port in order to determine or deter any security threat against hackers.

Claim 103: Ng discloses character generating server capable of generating several different kinds of character sets in (fig.6).

Claims 144-145: Ng's patent discloses a character generating server comprising a random generator connecting to character generator in (fig.6,#50). A temporal reference storage connecting to character generator in (fig.6 and col.8,lines 54-57). Ng discloses a key pool group having a key and pool in (fig.6,#30), connected to character generator in (fig.6). Ng discloses character generating server being capable of generating a character set having a pre-set number of different characters in (col.8,lines 2-11;col.10,lines 8-12). Ng discloses network interface connecting to character generator in (fig.1,6). Ng does not specifically discloses an external timer device connecting to character generating server. Wrzesinski's patent discloses external timer device connecting to random number generator in (col.8,lines 1-20 and fig.6,#160). It would have been obvious to person of ordinary skill in the art at the time invention was made to employ an external timer to random generator as taught in Wrzesinski with random character generator disclosed in Ng in order to control output of the character. Using an external timer allows user to dictate and manage how frequent characters should be outputted thus maintaining data efficiency.

Claims 146,150: Ng does not specifically discloses an external timer device connecting to character generating server. Wrzesinski's patent discloses external timer device connecting to random number generator in (col.8,lines 1-20 and fig.6,#160). It would have been obvious to person of ordinary skill in the art at the time invention was made to employ an external timer to

random generator as taught in Wrzesinski with random character generator disclosed in Ng in order to control output of the character. Using an external timer allows user to dictate and manage how frequent characters should be outputted thus maintaining data efficiency.

Claim 147: Ng discloses character generating server access to function to encode and and send out information and to receive and decode information in (col.15,lines 9-17).

Claim 148: Ng discloses temporal reference storage stores the most current time information in (fig.14,#74).

Claims 152-153: Ng discloses character generating server has a plurality of key pool groups in (col.6,lines 63-66).

Claim 154: Neither Ng nor Wrzesinski specifically discloses character generating server clears pool each time pool is full. Official notice is taken that pool clearing when full is well known in the art. One of ordinary skill in the art would have been motivated to clear pool when full in order to enhance data efficiency and prevent bottleneck.

Claim 155: Ng discloses character generating server capable of generating several different kinds of character sets in (fig.6).

Claim 156: Neither Ng nor Wrzesinski specifically discloses character generating server listens on a fixed port for requests from a client. Official notice is taken that port listening is well known in the art. One of ordinary skill in the art would have been motivated to listen on fixed port in order to determine or deter any security threat against hackers.

Claims 197-198,208: Ng's patent discloses a character generating server comprising a random generator connecting to character generator in (fig.6,#50). A temporal reference storage connecting to character generator in (fig.6 and col.8,lines 54-57). Ng discloses a key pool group having a key and pool in (fig.6,#30), connected to character generator in (fig.6). Ng discloses character generating server being capable of generating a character set having a pre-set

number of different characters in (col.8,lines 2-11;col.10,lines 8-12). Ng discloses network interface connecting to character generator in (fig.1,6). Ng does not specifically discloses an external timer device connecting to character generating server. Wrzesinski's patent discloses external timer device connecting to random number generator in (col.8,lines 1-20 and fig.6,#160). It would have been obvious to person of ordinary skill in the art at the time invention was made to employ an external timer to random generator as taught in Wrzesinski with random character generator disclosed in Ng in order to control output of the character. Using an external timer allows user to dictate and manage how frequent characters should be outputted thus maintaining data efficiency.

Claim 199: Ng does not specifically discloses an external timer device connecting to character generating server. Wrzesinski's patent discloses external timer device connecting to random number generator in (col.8,lines 1-20 and fig.6,#160). It would have been obvious to person of ordinary skill in the art at the time invention was made to employ an external timer to random generator as taught in Wrzesinski with random character generator disclosed in Ng in order to control output of the character. Using an external timer allows user to dictate and manage how frequent characters should be outputted thus maintaining data efficiency.

Claim 200: : Ng discloses character generating server access to function to encode and and send out information and to receive and decode information in (col.15,lines 9-17).

Claim 201: Ng discloses temporal reference storage stores the most current time information in (fig.14,#74).

Claims 203-204: Neither Ng nor Wrzesinski specifically discloses list of mapping position. Official notice is taken that mapping position is well known in the art. One of ordinary skill in the art would have been motivated to use mapping position in order to mark the key thus preventing user from using used key which can be vulnerable for key attacks by the intruders.

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Claims 205-206: Ng discloses character generating server has a plurality of key pool groups in (col.6,lines 63-66).

Claim 207: Neither Ng nor Wrzesinski specifically discloses character generating server clears pool each time pool is full. Official notice is taken that pool clearing when full is well known in the art. One of ordinary skill in the art would have been motivated to clear pool when full in order to enhance data efficiency and prevent bottleneck.

Claim 209: Neither Ng nor Wrzesinski specifically discloses character generating server listens on a fixed port for requests from a client. Official notice is taken that port listening is well known in the art. One of ordinary skill in the art would have been motivated to listen on fixed port in order to determine or deter any security threat against hackers.

Claim 210: Ng discloses character generating server capable of generating several different kinds of character sets in (fig.6).

Allowable Subject Matter

4. Claims 1-37,53-89,104-143,157-196 are allowed.

Claims 1,15,29,53,67,81,104,119,134,157,172,187 are allowed: Prior art of record does not teach geometric progression manifesting itself as a chaotic progression of orbits around an origin,orbit being defined as a unique and continuous path around the origin and never crossing it on itself or any other orbit, $x(n)$ and $x(n-1)$ representing different character set, the n representing the number of character set generated by character generating server, the i representing a temporal difference between the time when two sequential orbits cross an arbitrary infinite vector from the origin, period being the temporal difference character sets along any of the orbit.

Claims 2-14,16-28,30-37,54-66,68-80,82-89,105-118,120-133,135-143,158-171,173-186,188-196 are allowed because of dependency.

5. Claims 45,97,149,202 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Objections

6. Claims 1,3-5,7-13,15,17,30,39,53,55-56,59-65,67,69-70,73-79,89,104,107-109,111-117,119,122-124,126-132,138,155,160-162,164-170,175-177,179-185,210 are objected to because of the following informalities. To be more precise and clear, please change the word "kind" to type. Appropriate correction is required.

Claims 40,47 are duplicate claim. Appropriate correction is required.

Claims 41,48 are duplicate claim. Appropriate correction is required.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

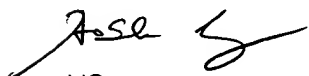
a. Rehm(US 5,740,243) discloses cryptographic guessing game with random character generator.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hosuk Song whose telephone number is 703-305-0042. The examiner can normally be reached on Tue-Fri from 6:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 703-305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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